

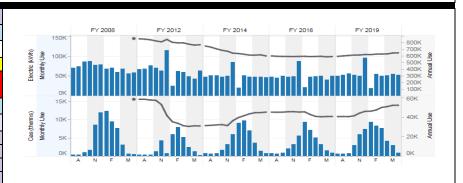
## **Building Dashboard**

| Middle School  |   |                   | 195 Federal Street   |  |                      |                              |
|----------------|---|-------------------|--|--|----------------------|------------------------------|
| Building Data  |   |                   |  |  |                      |                              |
| S              | tructural Details   | HVAC              |  | Condition                                  | Appliances/equipment |                              |
| Year Built     | 1924 Main building/auditorium<br>with additions   | Heating System    | Two Gas-Fired Condensing<br>Boilers, Mini-splits in offices<br>Several Air Handlers<br>Four Heat Recovery Units<br>3 Rooftop Units | EXCELLENT  GOOD  EXCELLENT (Replaced 2019) | Interior Lighting    | all upgraded to<br>LEDs 2018 |
| Square footage | 120,692   | Air Conditioning  | Economisers in ERUs, Mini-Splits in<br>Admin Offices, Air Conditioner in<br>Server Room  | GOOD or EXCELLENT                          | Exterior Lighting    | Needs Data                   |
| Envelope       | 3- Story Brick  | Hot Water Heater  | 2 NG Water Heaters<br>Supplying a 963 Gallon Tank  | EXCELLENT                                  | Vending<br>Machines  | Needs Data                   |
| Roof           | Flat roof with rubber membrane over steel deck<br>and bar joists. Auditorium (original building) has<br>pitched roof with asphalt shingles on wood<br>sheathing and wood framing. | Ventilation       | Four Energy Recovery Units on<br>Roof<br>Several Ventilators and<br>Exhaust Fans   | GOOD/EXCELLENT                             |                      |                              |
| Windows        | Double Glazed   | Heat Distribution | Baseboard Radiation Using 2<br>Circulation Pumps   | POOR                                       |                      |                              |
| Insulation     | 3" of foam insulation in roof   | EMS               | SNE/Siemens systems - Controls Boilers, Pumps, Setbacks. Upgrades in Scheduling and Demand Control Ventilation in 2015             |  |                      |                              |
|                | Major Penevation in 1998 general construction, mechanical and electrical. Converted from oil to natural again 2011  |                   |  |  |                      |                              |

**Building Summary** 

Major Renovation in 1998 general construction, mechanical and electrical. Converted from oil to natural gas in 2011. Upgraded fixtures, lamps, and ballasts and installed occupancy sensors in 2015. In 2016, School Admin moved in requiring an HVAC upgrade (heat pumps). Three rooftop units replaced in January 2019

| Energy Profile - FY2019                 |             |            |  |  |
|---|-------------|------------|--|--|
| Energy Efficiency (BTU per Square Foot) |             |            |  |  |
| Electric                                | Total       |            |  |  |
| 18,245 42,961                           |             | 61,206     |  |  |
| If Total is ≤ 40K                       | 40K-80K     | >80K       |  |  |
| Great!                                  | OK          | Needs Work |  |  |
| Annual Energy Cost                      |             |            |  |  |
| Electric                                | Heat        | Total      |  |  |
| \$116,023                               | \$48,401    | \$164,424  |  |  |
| Berkshire Gas Rate Clas                 | G41 and G42 |            |  |  |
| Electric Service Rate Cla               | <u>G2</u>   |            |  |  |
| Average Monthly Dema                    | 200         |            |  |  |



| Completed Work                                     |   |              |                |                 |          |
|--|---|--------------|----------------|-----------------|----------|
| Fiscal Year Project                                |   | Project Cost | Grants/Rebates | Life Expectancy | Warranty |
| 2011   | 2011 Oil to natural gas conversion                                    |              | N/A            | N/A             | N/A      |
| 2013   | 2013 Boiler Upgrade   |              | N/A            | N/A             | N/A      |
| 2017   | School Admin moved to Middle School; Heat pumps added to office space |              | N/A            | N/A             | N/A      |
| 2019 LED lighting upgrade- on bill financed        |   | \$73,226     | \$31,385       | 20+ years       | 5 years  |
| 2019 3 new Rooftop Units (Green Communities Grant) |   | \$158,678    | \$108,870      | 20+ years       | 5 years  |
| 2019 Auditorium Lighting Upgrade                   |   | \$50,786     | N/A            | N/A             | N/A      |

| Capital Improvement Plan Projects |   |              |                |                 |          |
|-----------------------------------|---|--------------|----------------|-----------------|----------|
| Fiscal Year                       | Project   | Project Cost | Grants/Rebates | Life Expectancy | Warranty |
| 2020-22                           | Food Service Appliance Replacement (with High School) | \$152,500    | N/A            | N/A             | N/A      |

| Audits/Assessments        |                                   |   |  |
|---------------------------|-----------------------------------|---|--|
| Fiscal Year Type Findings |                                   | Findings  |  |
| 2009                      | Siemens Whole building assessment | Report available upon request                               |  |
| 2016                      | Solect Solar Assessment           | 195 kW system on roof proposed - in queue for SMART Program |  |